

## CLAIMS:

1. A wireless network comprising at least a base station and a plurality of assigned terminals for exchanging user data and control data, which terminals are each provided for transmitting to the assigned base station a reservation message that depends on a (first persistency probability) for assigning transmission capacity for at least one data packet,  
5 characterized  
in that the further transmission of a reservation request received at least once by the base station depends on at least a (further persistency probability).

2. A wireless network as claimed in claim 1,  
10 characterized  
in that the data packet comprises a preamble and a data part and in that the transmission of a preamble is a reservation request from a terminal.

3. A wireless network as claimed in claim 2,  
15 characterized  
in that a terminal, after receiving an assignment message, is provided for transmitting the data part of the data packet.

4. A wireless network as claimed in claim 1,  
20 characterized  
in that a terminal is provided for transmitting a reservation request for the first time when the (first persistency probability) predefined by the base station is larger than a random number generated in the respective terminal, and  
in that a terminal is provided for transmitting a reservation request received at least once by  
25 the base station when the (further persistency probability) predefined by the base station is larger than a random number generated in the respective terminal.

5. A wireless network as claimed in claim 1,  
characterized

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in that the base station is provided for determining the first and second persistency probability in dependence on the traffic load, so that with a small traffic load the first and the second persistency probability are higher than with a higher traffic load.

- 5 6. A wireless network as claimed in claim 1,  
characterized  
in that the base station is provided for transmitting the [further persistency probability] only  
after the transmission of a complete data packet has been rejected.

$P_1, P_2$   $>$   $P_1, P_2$   
(small traffic load) (high traffic load)

- 10 7. A wireless network as claimed in claim 4,  
characterized  
in that the base station is provided for transmitting a second persistency probability only  
when previously a rejection message has been sent.

- 15 8. A wireless network as claimed in claim 4,  
characterized  
in that the base station is provided for periodically transmitting the first, a third and a fourth  
persistency probability and  
in that a terminal is provided for comparing the first persistency probability with a random  
20 number generated in the respective terminal if after a [defined space of time] the terminal again  
wishes to transmit a reservation message,  
in that a terminal is provided for comparing the third persistency probability with a random  
number generated in the respective terminal if during the [defined space of time] the terminal  
again wishes to transmit a reservation message, and  
25 in that a terminal is provided for comparing the fourth persistency probability with a random  
number generated in the respective terminal if, [after a step-by-step increase of the  
transmission power to a maximum value and a repeated transmission of the reservation  
message, a terminal has received [neither an assignment message nor a rejection message].

- 30 9. A wireless network as claimed in claim 1,  
characterized  
in that the base station is provided for transmitting a factor only after the transmission of a  
complete data packet has been rejected, and

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in that a terminal is provided for forming the further persistency probability from the received factor and the first persistency probability.

10. A base station in a wireless network having a plurality of assigned terminals  
5 for exchanging user data and control data and for transmitting a reservation message depending on a first persistency probability for the assignment of transmission capacity for at least one data packet to the base station, characterized  
in that the further transmission of a reservation message received at least once from the base  
10 station depends on at least one further persistency probability.
11. A terminal in a wireless network comprising at least one base station and further assigned terminals for exchanging user data and control data and for transmitting a reservation request depending on a first persistency probability for the assignment of  
15 transmission capacity for at least one data packet to the assigned base station, characterized  
in that the further transmission of a reservation message received at least once by the base station depends on at least one further persistency probability.

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## ABSTRACT:

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5 The invention relates to a wireless network comprising at least a base station and a plurality of assigned terminals for exchanging user data and control data, which terminals are each provided for transmitting a reservation message depending on a first persistency probability for assigning transmission capacity for at least one data packet to the assigned base station. The further transmission of a reservation message received at least once by the base station depends on at least a further persistency probability.

Fig. 1

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